

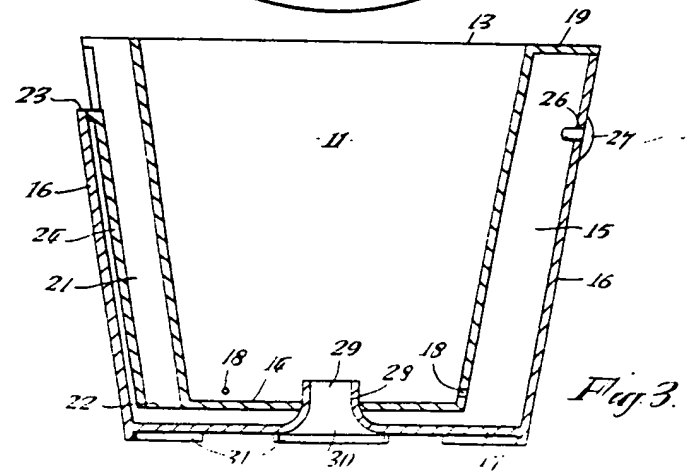
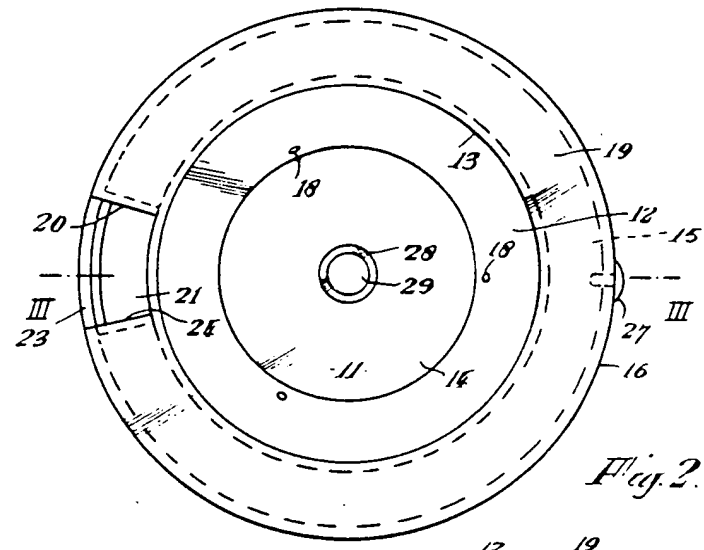
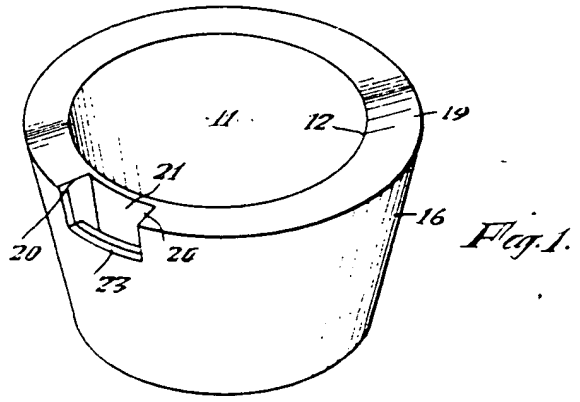
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COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of the Original on a reduced scale



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PATENT SPECIFICATION

DRAWINGS ATTACHED

1.1

1112,153



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COMPLETE SPECIFICATION

Improvements in or relating to Pots for Horticultural Plants

I, ERIC DENYS DELANEY, a British subject, of Gladsmuir House, Hadley Common, Barnet, Hertfordshire, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to pots for horticultural plants the object being to provide improvements therein.

Potted horticultural plants require to be supplied with moisture at controlled rates. It has always been a difficult matter to ensure this when the plant has to be left unattended for a long period of time, for example when the owner goes on holiday.

According to this invention, a pot for a horticultural plant comprises two separate compartments, one or the first compartment being adapted to contain the plant and the soil therefor, the other or second compartment being adapted to contain liquid, the two compartments being separated from each other by at least one common wall, at least one orifice being provided in a said common wall at or near to the bottom end of the first compartment to allow flows of liquid and of air between the two compartments, a tubular element being provided at the bottom end of the first compartment, one end of the said tubular element being open within the first compartment and located above the level of the said orifice or orifices, the other end of the said tubular element being open and located externally of the pot, a tube disposed within and extending down the second compartment, the top end of the tube being open to the exterior of the pot, the bottom end of the tube being open in the second compartment and spaced from the bottom end of the second compartment, an outer wall of the second compartment being provided

ed with a hole for venting air from the said compartment, and a plug being provided for closing the said vent hole, the said vent hole being located below the level of the open top end of the said tube, and the second compartment being closed except for the said orifice or orifices, the said tube, and the said vent hole.

One embodiment of the invention is shown in the accompanying drawings, wherein:—

Fig. 1 is a perspective view of the plant pot;

Fig. 2 is a plan view of the pot shown in Fig. 1; and

Fig. 3 is a sectional elevation taken on line III—III of Fig. 2.

A first compartment 11 is provided by an inner container 12 which is substantially of the same shape as a normal plant pot, that is, with an open top 13 and a closed bottom 14, and decreasing in horizontal cross-sectional area from top to bottom; the compartment 11 is circular in horizontal cross-section or plan, but it may be rectangular, polygonal or any other desirable shape.

A second compartment 15 is provided by an outer container 16, which second compartment is disposed immediately outside of the first compartment 11 and is annular and concentric with the first compartment; however, when the first compartment 11 is other than circular in plan the second compartment 15 may be correspondingly arranged around the first compartment.

The bottom end 17 of the container 16 is spaced from and below the bottom end 14 of the container 12 to provide a space which is part of the compartment 15. The side wall of the first compartment 11, which is also the inner side wall of the second compartment 15, is orificed, at 18, near to the bottom end wall

thus preventing flooding of the plant.

5 The second compartment may be formed in any suitable manner outside of the first compartment. For example, the second compartment may be substantially of crescent-shape in plan, and extend the full length or height of the first compartment, being in the form of a protuberance on the outside of the first compartment.

10 The plant pot may be made of clay, metal, plastics, or any other suitable material.

WHAT I CLAIM IS:—

1. A pot for a horticultural plant, comprising two separate compartments, one or the first compartment being adapted to contain the plant and the soil therefor, the other or second compartment being adapted to contain liquid, the two compartments being separated from each other by at least one common wall, at least one orifice being provided in a said common wall at or near to the bottom end of the first compartment to allow flows of liquid and of air between the two compartments, a tubular element being provided at the bottom end of the first compartment, one end of the said tubular element being open within the first compartment and located above the level of the said orifice or orifices, the other end of

the said tubular element being open and located externally of the pot, a tube disposed within and extending down the second compartment, the top end of the tube being open to the exterior of the pot, the bottom end of the tube being open in the second compartment and spaced from the bottom end of the second compartment, an outer wall of the second compartment being provided with a hole for venting air from the said compartment, and a plug being provided for closing the said vent hole, the said vent hole being located below the level of the open top end of the said tube, and the second compartment being closed except for the said orifice or orifices, the said tube, and the said vent hole.

2. A plant pot according to claim 1, wherein the second compartment surrounds the first compartment.

3. A pot for a horticultural plant, substantially as described herein and shown in the accompanying drawings.

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low liquid-flow between the two compartments 11 and 15.

The top end of the second compartment 15 is closed by a top wall 19 except for a portion which provides part of the top open end of a filling tube 21. The tube 21 is disposed within the compartment 15 and extends between the top and bottom ends of the said compartment, the bottom end 22 of the tube being open and spaced from the bottom end wall 17 of the outer container 16, whilst the top end is open and formed by the said portion 20 of the top wall 19 and a portion 23 which is omitted from the adjacent top of the side wall of the outer container 16. The tube 21 is formed by an element 24 substantially of channel section which has its side and top edges secured to the side and top walls of the container 12, and the top of its front wall secured to the wall of the container 16, in liquid-tight and air-tight manner; the element 24 may be moulded integrally with the container 12.

A hole 26 is provided in the side wall of the container 16, at a position below the level of the top open end 20, 23 of the tube 21, and the hole 26 is adapted to be closed by a plug 27.

A tubular extension 28 of the bottom wall 17 of the outer container 16 extends upwardly from said bottom wall 17 through the bottom wall 14 of the inner container 12 to an elevation above the orifices 18, the top end 29 of the tube 28 being open to the inner compartment 11, whilst the bottom end 30 of the said tube is open to the exterior of the outer container 16. The tube 28 is secured to the bottom wall 14 in liquid-tight and air-tight manner.

The outer container 16 is provided, externally, of its bottom wall 17, with feet 31 which enable air to reach the open bottom end 30 of the tube 28.

The second or outer compartment 15 is closed except for the orifices 18, the filling tube 21, and the hole 26.

In use, a plant together with the usual soil is disposed in the first or inner compartment 11 in the usual manner. The plug 27 is removed from the hole 26, which provides an air vent from the compartment 15, and water, or other liquid, is charged into the outer compartment 15 through the open top 20, 23 of the tube 21, which provides a filling tube for the liquid. The arrangement of the open top of the filling tube 21, which open top is provided by the omitted portion 20 of the top wall 19 and the omitted portion 23 of the side wall of the container 16, enables filling to be effected very conveniently. The liquid will flow into the compartment 15 through the open bottom end 22 of the filling tube 21 and will rise in the compartment. When the liquid in the compartment 15 reaches the level of the vent hole 26, or earlier if desired, the hole 26 is closed by the plug 27.

Liquid can only flow into the compartment 11, containing the soil and plant, through the orifices 18; the orifices are only large enough to allow a small flow of liquid therethrough (for convenience of illustration the orifices 18 are shown in the drawings larger, in relation to the remainder of the pot, than they would actually be), and therefore no considerable amount of liquid will flow therethrough whilst the compartment 15 is being filled and before the hole 26 is closed by the plug 27.

When the vent hole 26 is sealed by the plug 27, and whilst there is liquid in the compartment 15 to a level above the bottom end 22 of the filling tube 21, air can enter the second or outer compartment 15, to replace any liquid which flows out of that compartment, only through the orifices 18, and then only when the said orifices are not sealed by liquid in the bottom of the first or inner compartment 11.

A small quantity of liquid will flow from the compartment 15 into the bottom of the compartment 11, to provide moisture for the plant, through the orifices 18 when the level of liquid in the compartment 11 is not sufficient to cover or seal the said orifices. At the same time air will penetrate the soil in the compartment 11 and enter the compartment 15 through the orifices 18 in order to replace the liquid which has flowed between the two compartments. As soon as the level of the liquid in the compartment 11 is such as to cover or seal the orifices 18, flow of air and of further liquid between the two compartments will cease. When the liquid in the compartment 11 has been used up by the plant, sufficiently to unseal the orifices 18, flow of air and liquid between the two compartments will recommence and this cycle of events will be repeated until the whole of the liquid in the compartment 15 above the seal provided by the bottom end of the filling tube 21 has flowed into the compartment 11. According to the volume of the compartment 15, it may take a long period of time for the compartment 15 to be emptied of liquid, and this period may be greater, for example, than the period of time that the owner of the plant is away on holiday or otherwise.

The common wall between the two compartments may be extended down to the bottom end wall of the outer container, the orifice between the two compartments, at the bottom ends thereof, being provided by not sealing the bottom end of the said common wall to the said bottom end wall of the outer container.

The tube 28 provides means for air to enter the soil at the bottom end of the compartment 11, and thus assist in aerating or ventilating the soil, and it also will provide an overflow duct for any abnormal amount of liquid which may flow into the compartment 11 or be absorbed by the soil by reason, for example, of the plug 27 being insecure or displaced, and